

WHAT IS CLAIMED IS:

1. A viewing device for use with an image transparency having an associated tracking memory, the viewing device, comprising:
 - a display adapted to present at least two illumination patterns;
 - a reader device for obtaining data stored in a tracking memory of an image transparency positioned proximate to the display;
 - a control processing unit adapted to receive the obtained data and to cause the display to generate more than one illumination pattern with a first of the illumination patterns formed for passing through the transparency and second of the illumination patterns formed for viewing on the display without passing through the transparency, and
 - wherein the appearance of at least one of the illumination patterns is determined based upon the data obtained from the tracking memory.
2. The viewing device of claim 1, wherein the control processing unit is further adapted to obtain at least one electronic image from an image database using the obtained data, and wherein the electronic image is presented as one of the illumination patterns.
3. The viewing device of claim 1, wherein the image is stored in the tracking memory.
4. The viewing device of claim 1, wherein the control processing unit uses the obtained data to form one of the illumination patterns as a generally uniform light-providing area automatically sized to the outline of the image transparency and the control processing unit arranges the generally uniform light-providing area so that the light-providing area passes light through the image transparency.
5. The viewing device of claim 1, wherein at least one of the illumination patterns comprises a generally light-providing area wherein the size and placement of said light-providing area is defined by a viewer.
6. The viewing device of claim 1, wherein said display further comprises a touch-screen.

7. The viewing device of claim 1, further comprising a stylus for annotation of images presented using said display.
8. The viewing device of claim 1, wherein said display provides at least one of a static attraction, a vacuum attraction and an electronic static attraction to said image transparency so that said image transparency is held against the display.
9. The viewing device of claim 1 wherein said display comprises a light box portion having a light source and diffuser for providing the first illumination pattern and a dynamic display portion having a dynamically adjustable display for providing the second illumination pattern.
10. The viewing device of claim 1 wherein said reader device comprises at least one of a radio frequency transceiver, an optical sensor, an electronic memory reader, and/or a magnetic sensor.
11. The viewing device of claim 1 wherein said display surface is at least one of a liquid crystal display, a cathode ray tube, an organic light emitting display, an organic electroluminescent display, and a gas plasma display.
12. The viewing device of claim 1, wherein said display surface is a tiled display.
13. The viewing device of claim 1, further comprising a text entry surface to receive annotation information wherein the control processing unit stores the annotation information in association with the image.
14. The viewing device of claim 1, further comprising an audio capture system for recording audio information.
15. A viewing device for simultaneously displaying an image transparency and at least one electronic image, comprising:
a display surface comprising:

an adjustable light-providing area for providing an area of backlight illumination through the image transparency;

an electronic image area for display of said at least one electronic image;

a transceiver for reading patient information from a radio frequency transponder coupled to the image transparency, said radio frequency transponder comprising a memory with patient information stored therein; and

a control processing unit, provided with a communication link for obtaining said at least one electronic image from a patient database using the patient information and causing the electronic image to be presented.

16. The viewing device of claim 15, wherein said display surface comprises a touch screen display surface.

17. The viewing device of claim 15, wherein said patient information includes a network address for obtaining said electronic image using the network.

18. The viewing device of claim 15, wherein said patient information includes at least one electronic image.

19. The viewing device of claim 15, wherein the memory stores patient identification information.

20. The viewing device of claim 15, wherein the memory also stores information about light transmission characteristics of the image transparency and the control processing unit adjusts operation of the adjustable light providing area based upon the light transmission characteristics.

21. The viewing device of claim 15, wherein the memory also stores area of interest information and wherein the control processing unit adjusts operation of the adjustable light providing area to illuminate the area of interest so that the light passing from the adjustable light providing area through the area of interest has an appearance that is different from light passing from the adjustably light providing area through other areas of the transparency.

22. The viewing device of claim 15, wherein the transceiver further senses identifying data for radio frequency transponders associated with at least one person in a range proximate to the display, and the control processing unit determines permissions for viewing the image transparency based upon the identifying data and wherein the control processing unit causes the first illumination pattern to be formed only when at least one identified person has permission to view the image.

23. The viewing device of claim 15, further comprising an interface for communicating with other imaging devices wherein the control processing unit uses the obtained data to enable the other imaging devices to receive data related to the subject of the image transparency for presentation.

24. The viewing device of claim 15, wherein the transceiver further senses identifying data in radio frequency transponders that are associated with at least one person in a range proximate to the display and the control processing unit determines access permissions for each identified person and wherein the control processing unit uses the obtained data to enable other imaging devices only where at least one identified person has access privileges for viewing data related to the person.

25. The viewing device of claim 15 wherein the adjustable light providing area is capable of providing colored light and wherein the control processing unit sets the color of said backlighting window based upon information stored in the memory.

26. A display screen comprising:
a backlighting window for providing backlight illumination through a transparency; and,
a display window for displaying at least one electronic image;
a radio frequency transceiver for obtaining data from a radio frequency transponder on the transparency, and
a control processing unit that adjusts the appearance of at least one window based upon data obtained from the radio frequency transponder.

27. The display screen of claim 26, wherein said obtained data comprises at least one data that indicates a transparency type, transparency color characteristics, transparency age, and transparency density adjustment curve information.

28. The display screen of claim 26, wherein said obtained data includes patient identification data and the appearance of at least one window is determined based upon the patient identification data.

29. A method for operating a display for simultaneous viewing of an image transparency and at least one electronic image, comprising:
detecting a tracking memory coupled to the image transparency;
reading information from the tracking memory;
forming a first illumination pattern for providing a backlighting source for an image transparency;
forming a second illumination pattern for presenting an electronic image; and
wherein at least one of the first illumination pattern and second illumination pattern are provided based upon the information read from the tracking memory.

30. The method of claim 29, further comprising the steps of identifying at least one viewer and determining permissions for viewing the illumination patterns based upon the permissions.

31. The method of claim 29, further comprising the steps of identifying at least one viewer and the step of setting ambient lighting conditions based upon user preferences for the identified viewer.

32. The method of claim 29, further comprising the steps of identifying at least one viewer and the step of setting ambient environmental conditions based upon user preferences for the identified viewer.